

60-13 Aquasil Altus Automated Cartridge Delivery System (Project 99-51) (9/00)

The Aquasil Altus Automated Cartridge Delivery System is a hand-held, electrically-powered device for mixing and dispensing impression material. The unit, which looks somewhat like a traditional automix dispenser gun, is designed to accept Dentsply's 50-mL cartridges of Aquasil, an addition silicone. Aquasil is available for the Altus dispenser in three introductory kits: monophasic and light viscosity, rigid and light viscosity (regular set), and rigid and light viscosity (fast set). Only the monophasic and light-viscosity kit was used in this evaluation. It is important to note that not all manufacturers' cartridges fit in the unit, so it is important to determine compatibility with your brand of impression material should you decide to use something other than Aquasil.



To use the dispenser gun, it is opened along a hinged joint, the impression material cartridge is inserted, and the unit is snapped shut. After a tip is placed on the cartridge, the gun is activated by depressing a button on the front of the handle. The motor speed is variable based on how far the button is depressed. After the button is released, the motor reverses very briefly to prevent unnecessary impression material from being extruded from the tip. The unit is approximately the size of a standard automix gun, weighs 1.5 pounds, and has a 4-foot-long cord that can easily be stretched to 8 feet. It comes with a three-year full replacement warranty.



Manufacturer:

L.D. Caulk Division
Dentsply International, Inc.
P.O. Box 359
Milford, DE 19963-0359
(800) 532-2855
(302) 422-4511
(800) 788-4110 FAX
www.caulk.com

Suggested Retail Price:

\$1,487.70 Aquasil Altus Monophasic and LV Introductory System (item number 678399)
-1 Aquasil Altus Automated Cartridge Dispenser
-1 Aquasil 50-mL Manual Dispenser
-2 bottles of Dentsply/Caulk Tray Adhesive
-25 intraoral tips
-78 mixing tips
-24 Cartridges (50-mL ea) of Aquasil Monophasic Material
-6 Cartridges (50-mL ea) of Aquasil Light-Viscosity Material

Government Price:

\$967.00 Item number and contents as listed above

ADVANTAGES:

- + Produces and dispenses well-mixed impression materials.
- + Makes it much easier to mix and dispense heavy-body impression materials than using traditional automix gun.
- + Cord is long enough for easy mobility in the treatment room.
- + Is quiet during use.

- + Unit automatically prevents unnecessary material from being extruded at the end of the mixing time.
- + Not adversely affected by the disinfecting solutions tested.
- + Passed all electrical safety test requirements.

DISADVANTAGES:

- Expensive; 16 times as expensive as standard automix gun.
- Is not compatible with every manufacturers' impression material cartridges.
- Not faster at mixing and dispensing than traditional automix guns.
- Variable-speed capability judged to be of little practical use.
- Some users may find the unit too heavy.
- Laminated, user-friendly instruction card not provided.

SUMMARY AND CONCLUSIONS:

The Aquasil Altus Automated Cartridge Delivery System mixes impression materials thoroughly and makes it much easier for assistants to mix and dispense heavy-body materials. The machine is quiet and easy to use, however some users found it heavier than they would have liked. It was also judged by some to be difficult to open when cartridges needed to be replaced. The unit's brief reverse operation when the trigger button is released prevents excess, unnecessary mixed material from being expressed. Its variable speed, however, was judged to be of little practical benefit in controlling the rate with which the unit mixed materials. The primary disadvantage of this product is its high cost. Coupled with the few advantages it provides compared to traditional, manually-operated automix guns, it is hard to justify its purchase by federal dental clinics. The **Aquasil Altus** is rated **Marginal** for use by the federal dental services.